



Memorandum

U.S. Department
of Transportation

**Federal Aviation
Administration**

Subject: Standard Content and Format for the Installation
Instructions and Limitations Required by TSO-C127a

Date:

SEP 8 2003

From: Manager, Aircraft Engineering Division, AIR-100

Reply to
Attn. of:

To: Directorate Managers
Aircraft Certification Office Managers

A Technical Standard Order (TSO) is a set of minimum performance standards (MPS) for a particular article. The TSO program is based on manufacturers performing an evaluation of their article and attesting that it meets the applicable MPS. It is the responsibility of the TSO applicant and holder to ensure the article meets the applicable TSO standards.

All products that are TSO approved (TSO authorization (TSOA) or Letter of TSO Design Approval (LODA)), conform to a minimum performance standard approved by the FAA. However, an article manufactured under a TSOA or LODA must get an installation evaluation and approval for the aircraft.

For some TSO articles the installation evaluation to the applicable airworthiness standards is simple. For instance, TSO-C13, life preservers or TSO-C22, seat belts, installation approvals are easy because their use are typically independent of the aircraft.

For seats approved to TSO-C127a, "Rotorcraft, Transport Airplane, and Normal and Utility Airplane Seating Systems", the installation in the aircraft is more complex. There is greater potential to install a TSO-C127a seat where it no longer meets all of the MPS. To avoid this, use good Installation Instructions and Limitations (IIL) that clearly define how the installation concerns were taken into account during the TSO process.

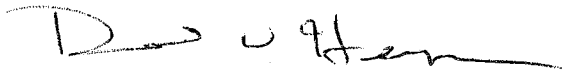
An industry committee with FAA advisory participation developed a standardized content and format for the IIL required by section 5.a.(2) of TSO-C127a. The standardized content and format for the IIL is in Appendices 1 and 2 of this memorandum. The intent of the standardized format is to streamline the seat certification process and promote standardization of TSO data used for airworthiness compliance.

A TSO article installed in accordance with an IIL as described in this memorandum should be subjected only to a determination that the article complies with the IIL. It is not necessary to investigate the data supporting the information approved in the IIL under the TSO approval.

This document proposes an acceptable means, but not the only means, for presenting an IIL that meets the requirements of TSO-C127a. The formatting guidelines allows seat manufacturers to follow them to the greatest extent possible, but still allow for the flexibility to adapt to each manufacturer's unique features.

You may use this document when revising IILs for existing TSO-C127 approvals.

We recommend ACO Managers forward this memorandum and attachment to all holders of TSO-C127a under their purview and any other appropriate industry representatives. Direct all questions about this memorandum to Hal Jensen, AIR-120, (202) 267-8807.

A handwritten signature in dark ink, appearing to read "David W. Hempe", with a long horizontal flourish extending to the right.

David W. Hempe
Manager, Aircraft Engineering Division, AIR-100
Aircraft Certification Service